



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,406	04/19/2001	Alain Benayoun	FR920000008US1	9357

26502 7590 03/29/2005

IBM CORPORATION  
IPLAW IQ0A/40-3  
1701 NORTH STREET  
ENDICOTT, NY 13760

EXAMINER

PEZZLO, JOHN

ART UNIT PAPER NUMBER

2662

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/838,406	<b>Applicant(s)</b> BENAYOUN ET AL.	
	<b>Examiner</b> John Pezzlo	<b>Art Unit</b> 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

I. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yu (US 5,734,865).

1. Regarding claims 1, 9, and 10 – Yu discloses a router (gateway router) suitable for use in transmitting a packet of data through a communication network wherein the best route through the network is determined at each node, Yu discloses the TCP/IP protocol wherein at each node and for each IP packet a route is determined, refer to column 3 lines 35 to 45 and column 10 lines 45 to 65.

Yu discloses logic for identifying and extracting higher-layer information carried by at least one of the layers above the lowest three layers of a communication protocol of a received packet, Yu discloses the use of TCP/IP and FTP wherein the TCP and FTP protocols are above layer three and the port number of the TCP protocol is extracted by the IP protocol and converted to a destination and source address, refer to Figures 2 and 3 and column 3 lines 55 to 67 and column 4 lines 1 to 20 and column 11 lines 65 to 67 and column 12 lines 1 to 40.

Yu discloses a configuration table for associating the higher-layer information with lower-layer information carried by at least one of the lowest three layers of the communication protocol, Yu discloses a LAN physical layer and utilizing data structures (configuration tables) to map the FTP and TCP/IP information to the Ethernet addresses, refer to Figures 4 and 5 and column 13 lines 48 to 67 and column 14 lines 1 to 32 and columns 15 and 16.

Yu discloses a routing table for determining routing of the packet, responsive to the lower-layer information, refer to Figure 2 and column 10 lines 65 to 67 and column 11 lines 1 to 18.

2. Regarding claims 2 and 4 and 11 and 13 – Yu discloses the higher-layer information comprises a protocol identifier and a port number, Yu discloses the use of the FTP application and the TCP/IP protocol wherein the TCP protocol includes the identifier of the FTP protocol and a port number associated with the application, refer to column 4 lines 4 to 20 and column 11 lines 65 to 67 and column 12 lines 1 to 25.

3. Regarding claims 3 and 12 – Yu discloses the lower-layer information comprises a type of service identifier, Yu discloses a socket which identifies an application (type of service) and discloses that the socket is defined by an IP address, refer to Figure 3 and column 11 line 65 to column 12 line 15.

4. Regarding claims 5 and 14 – Yu discloses the lower-layer information is carried by Internet Protocol (IP), refer to Figure 3 and column 11 line 65 to column 12 line 15.

5. Regarding claims 6 and 15 – Yu discloses the higher-layer information is carried by Transmission Control Protocol (TCP), refer to Figure 3 and column 11 line 65 to column 12 line 15.

6. Regarding claim 7 – Yu discloses the logic further comprises a forwarding processing unit, refer to Figure 1b and column 9 lines 10 to 64.

7. Regarding claim 8 – Yu discloses the logic further comprises a forwarding processing unit, Figure 1b and column 9 lines 10 to 64.

### ***Response to Arguments***

Applicant's arguments filed 7 March 2005 have been fully considered but they are not persuasive. Applicants argue on pages 6, 7, and 8 that Yu does not show associating a higher layer with lower layer information of at least three layers and that Yu does not select a route for the packet through the network by accessing a routing table containing a plurality of routes on such lower layer information. The examiner respectfully disagrees. Yu discloses associating a higher layer with lower layer information of at least three layers, physical, link, and network layers the lowest three layers of the OSI model. The examiner has shown how Yu utilizes TCP/IP and FTP wherein TCP and FTP are above layer three and the port number of the TCP protocol is extracted by the IP protocol and converted to a destination and source address, refer

Art Unit: 2662

to Figures 2 and 3 and column 3 lines 55 to 67 and column 4 lines 1 to 20 and column 11 lines 65 to 67 and column 12 lines 1 to 40. Yu discloses a configuration table (routing table) for associating the higher-layer information with lower-layer information carried by at least one of the lowest three layers of the communication protocol, Yu discloses a LAN physical layer and utilizing data structures (configuration tables/routing tables) to map the FTP and TCP/IP information to the Ethernet addresses, refer to Figures 4 and 5 and column 13 lines 48 to 67 and column 14 lines 1 to 32 and columns 15 and 16.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Elliott et al. (US 6,754,181 B1) discloses a system and method for a directory service supporting a hybrid communication system architecture.
2. Elliott et al. (US 6,335,927 B1) discloses a system and method for providing requested QoS in a hybrid service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:


Application/Control Number: 09/838,406  
Art Unit: 2662

Page 7

Jefferson Building  
500 Dulany Street  
Alexandria, VA.

John Pezzlo

22 March 2005



**JOHN PEZZLO**  
**PRIMARY EXAMINER**